

REMARKS/ARGUMENTS

In this response, claims 1, 9, 38, 50, 81 are being amended, claims 8, 49, and 82 are being canceled, and no claims are being added. Therefore, claims 1-7, 9-48, 50-81, and 83-86 will remain pending in the application after entry of this amendment. Reconsideration and continued examination of this application is respectfully requested in view of the amendments above and the remarks below.

Claim 1 is being amended to incorporate language from claim 8, and claim 8 is consequently being canceled. Claim 9 is being amended to depend from amended claim 1 rather than from canceled claim 8. No new matter has been added.

Independent claim 38 is being amended to incorporate language from claim 49, and claim 49 is consequently being canceled. Claim 50 is being amended to depend from amended claim 38 rather than from canceled claim 49. No new matter has been added.

Independent claim 81 is being amended to incorporate language from claim 82, and claim 82 is being canceled. No new matter has been added.

Allowable Subject Matter

Claim 51 was objected to as being dependent upon a rejected base claim, but was indicated to be allowable if rewritten in independent form. Applicants acknowledge with appreciation this indication, but, in view of the reasons for allowance given in paragraph 13 of the Office Action, believe it is based upon an erroneous interpretation of the claim which would require the disordered breathing processor and the respiration processor to be embodied in completely separate and distinct processors. Applicants therefore decline to rewrite claim 51 in independent form.

Claim Rejections – 35 U.S.C. § 112, sixth paragraph

Applicants note that numbered paragraph 1 of the Office Action is under the heading “Claim Rejections – 35 USC, §112, 6th Paragraph”. Applicants wish to clarify and confirm that that numbered paragraph of the Office Action is not rejecting the referenced claims 81-86 solely as a result of their inclusion of means-plus-function claim elements. Furthermore,

Applicants acknowledge the Examiner's interpretation of the various cited means-plus-function elements, but reserve the right to dispute any of those interpretations to the extent they may become pivotal in the future.

Claim Rejections – 35 U.S.C. § 102

Claims 1-4, 6, 7, 22-24, 28, 29, and 30-37 were rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Publication No. 2004/0102814 (Sorensen et al.), hereinafter “Sorensen”.

Independent claim 1 has been amended to include limitations from originally filed claim 8, which was not rejected over Sorensen. Each of the rejected dependent claims 2-4, 6, 7, 22-24, 28, 29, and 30-37 likewise incorporate these limitations. The rejection is therefore deemed to be moot. Withdrawal of the rejection of claims 1-4, 6, 7, 22-24, 28, 29, and 30-37 is respectfully requested.

Applicants do not acquiesce to the characterizations in the Office Action of the claims or the applied references, which characterizations are rendered moot by the amendment to claim 1. For example, the Office Action rejected claim 28 on the basis that Sorensen allegedly teaches “aligning a particular symbol relative to the respiration waveform to indicate a time of occurrence of a particular respiration characteristic (¶ 65 & 66)”. No teaching can be found in the cited passages of aligning one or more symbols *indicating one or more characteristics associated with the respiration* relative to the respiration waveform. Simply aligning a respiration waveform with an arbitrary time scale would fail to satisfy the requirements of claim 28, unless a mark associated with the time scale was *indicative of one or more characteristics associated with the respiration*.

Claims 1 and 8-9 were rejected based under 35 U.S.C. §102(b) as being anticipated by U.S. Patent 6,890,306 (Poezevera). This rejection cannot be sustained.

Claim 8 has been canceled. Claim 1 as amended specifies that the generating a marked waveform is “in response to [a detected] triggering event”. The Office Action asserts that this can be found in FIG. 1 of Poezevera, where “the triggering event comprises

a disordered breathing event (c & d in Fig. 1).” This cannot be sustained for at least two reasons. First, to the extent Poezevera’s FIG. 1 depicts a marked respiration waveform, there is nothing to indicate that any of the symbols used in that figure are generated by the medical device described in Poezevera, or any other device. Rather, the figure appears to simply be a graph provided for explanatory purposes, where the various words, reference labels, and other indicia are included in the figure to better explain Poezevera’s alleged invention to the reader of the patent. See e.g. column 2 lines 40-43 (“FIG. 1 illustrates a series of chronographs explaining the way in which discrimination between awakening and sleep is operated ….”) Second, there is no teaching that any marked respiration waveform is generated “in response to [a detected] triggering event” as set forth in amended claim 1. Rather, the waveforms of Poezevera’s FIG. 1 seem to be present whether or not any triggering event occurs, and no symbols indicative of a characteristic associated with the respiration are provided. Therefore, since Poezevera fails to teach “detecting a triggering event” together with “generating the marked respiration waveform in response to the triggering event”, it cannot anticipate claim 1 or its dependent claim 9, and the rejection of claims 1 and 9 over Poezevera should be withdrawn.

Claims 38, 49-50, 65, 66, 68-70, 73-77 and 81-83 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent 6,928,324 (Park et al.), hereinafter “Park”. The Office Action cited column 14 lines 20-30 and column 8 lines 38-52 in reference to independent claims 38 and 81. The Office Action cited column 21 lines 30-43 as well as column 8 lines 38-65 in reference to a group of dependent claims that included claims 49 and 82. The rejection cannot be sustained.

Dependent claim 49 has been canceled, and its language incorporated into independent claim 38. Thus, amended claim 38 recites a respiration waveform sensor, a respiration processor comprising a trigger circuit configured to detect a triggering event, and a waveform generator. The waveform generator is configured to generate a marked respiration waveform “in response to the detection of the triggering event”. Even if Park teaches generating a respiration waveform with suitable markers in column 8 lines 38-52

and even if Park teaches the detection of sleep apnea in the cited passage(s), Park does not teach “[activating] the generation of the marked respiration waveform … in response to the detection of the triggering event” as set forth in amended claim 38. No such activation is discussed. The rejection of claim 38 and its dependent claims 50, 65, 66, 68-70, and 73-77 should therefore be withdrawn.

Dependent claim 82 has been canceled, and its language incorporated into independent claim 81. Claim 81 as amended recites (among other things) “means for generating a marked respiration waveform *in response to the triggering event*” (emphasis added). Again, even if Park teaches generating a respiration waveform with suitable markers, and even if Park teaches the detection of sleep apnea, Park does not teach such a generating means as now set forth in claim 81. The rejection of claim 81 and its dependent claim 83 over Park should be withdrawn.

Claim Rejections – 35 U.S.C. § 103

Claims 1, 5, 10-12, 14-17, and 25-27 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent 5,540,732 (Testerman) and in view of U.S. Publication No. 2002/0193839 (Cho et al.), hereinafter “Cho ‘839”. Claims 1, 10, 12-21, 41-42, 44, 46-48, 52-64, 67, 71-72, 78-80, 84, and 86 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,641,542 (Cho et al.), hereinafter “Cho ‘542”, and in view of Cho ‘839. Claims 43, 45, 79, and 85 were rejected under 35 U.S.C. §103(a) as being unpatentable over Cho ‘542 and in view of Cho ‘839 and further in view of U.S. Patent 6,770,022 (Mechlenburg et al.), hereinafter “Mechlenburg”.

These rejections are all submitted to be moot in view of the amendments to independent claims 1, 38, and 81 discussed above. Withdrawal of the rejections under 35 U.S.C. §103 is respectfully requested.

To the extent Applicants have not responded to any characterization by the Examiner of the asserted art or of Applicants’ claimed subject matter, or to any application

by the Examiner of the asserted art to any claimed subject matter, Applicants wish to make clear for the record that any such lack of response should not be interpreted as an acquiescence to such characterizations or applications. A detailed discussion of each of the Examiner's characterizations, or any other assertions or statements beyond that provided above is unnecessary. Applicants reserve the right to address in detail any such assertions or statements in future prosecution.

Conclusion

For the foregoing reasons, the application is submitted to be in condition for allowance, the early indication of which is earnestly solicited. If the Examiner believes it necessary or helpful, the Examiner is invited to contact the undersigned attorney to discuss any issues related to this case.

Respectfully submitted,

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